

Rainforests

Introduction

Rainforests have become one of the most talked about ecosystems in the world today. While they only cover around 6% of the Earth's surface they are home to over half of all known living species, with many scientists agreeing that there could still be millions more as yet undiscovered.

The tropical rainforests are found between the Tropic of Cancer to the north and the Tropic of Capricorn to the south. They are found in five main areas: Africa, South-east Asia, Madagascar, Australia and South America. They live up to their name by having a very high annual rainfall of between 200 and 1000cm. This amount of water, added to the high temperatures of the Tropics, makes the rainforest a very humid place with large amounts of moisture in the air. Due to the large number of trees and the fact that they are evergreen, very little sunlight can reach the floor of a rainforest, making it very dark. The forest floor is also quite musty, as the smells of rotting plants etc. are trapped beneath the leaves and there is little air movement due to the amount of vegetation.

When we study rainforests and their animals we split the area into layers: the forest floor is the lowest (0-5m), the understory (5-25m), the canopy (25-45m) and the emergent layer (45m+). The canopy layer has the highest biodiversity of the different areas. We can work out where animals are most likely to live by looking at how they are adapted. For example, monkeys have gripping hands and feet and a tail for balance which suggests that they would live up in the canopy, whilst antelopes are large and hoofed which would indicate that they remain on the forest floor.

Each living thing has an important role to play in the rainforest. Think of a tree: it not only provides shelter and homes for different species, but also provides food for a huge number of other species. These living things have also been used by humans for food and medicine, as well as the plant species producing large amounts of oxygen, making them hugely important. However, these amazing places are at risk of disappearing thanks to human activity.

Useful Websites

Rainforest information for children - <http://kids.mongabay.com/>

The Prince's Rainforests Project - www.rainforestsos.org

Information about the tropical rainforest biome -

www.blueplanetbiomes.org/rainforests

Rainforest education website - www.rainforesteducation.com

The Budongo rainforest research field station - www.budongo.org

General information about rainforests - www.rainforest-facts.com

Suggested Activities

Rainforest Animals activity - an activity sheet for students to complete as you explore the Zoo. By using the signs find out more information about a few of our rainforest animals.

Rainforest Animals trail - while in the zoo you can take your students to see some of our rainforest animals. This trail gives you locations, information and details about the rainforest layer they live in.

Rainforest Layers activity - this activity is designed for use in the classroom. Get the students to cut out and place the South American animals onto the rainforest background and fill in the names of the layers.

Bongo Camouflage activity - this activity can be carried out in the zoo or in the classroom. The bongo antelope is missing its camouflage, get the students to draw it in. The sheet also has facts about the animal.

Leopard Camouflage activity - this activity can be carried out in the zoo or in the classroom. The leopard is missing its camouflage, get the students to draw it in. The sheet also has facts about the animal.

Tiger Camouflage activity - this activity can be carried out in the zoo or in the classroom. The tiger is missing its camouflage, get the students to draw it in. The sheet also has facts about the animal.

Curriculum links

SCN 0-01a 'I have observed living things in the environment over time and am becoming aware of how they depend on each other.'

SOC 2-08a 'I can discuss the environmental impact of human activity and suggest ways in which we can live in a more environmentally-responsible way.'

Useful words

Camouflage - a method of hiding, when a living thing blends in with its surroundings.

Adaptations - ways that living things become better suited to their environment.

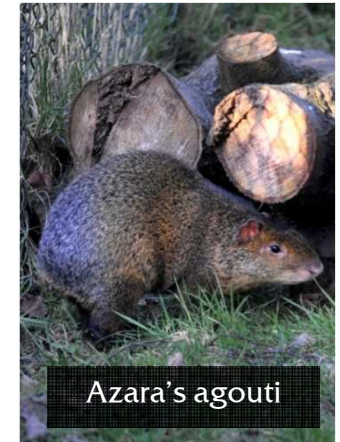
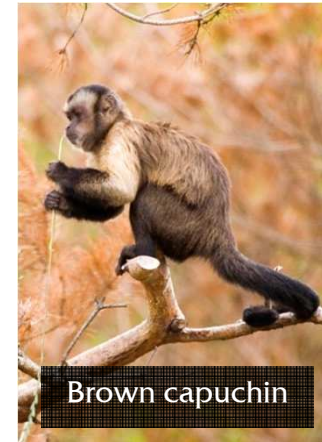
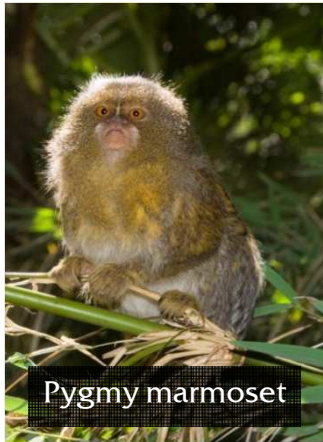
Biodiversity - the variety of living things within an ecosystem.

Ecosystem - a group of living and non-living things working together, these can be as large as the Earth or as small as a bush.

Equator - an imaginary line which runs around the centre of the earth equal distance from the North and South poles.

Rainforest Layers

The rainforest is divided into different layers. On the rainforest background write in the names of these layers. Then cut out the animals from this sheet and stick them on in the places where you think they would live. Look closely at the animals: think about how they move, how big they are and what body parts they have. This information will help you to place the animals in the correct layers.



Biodiversity

Student Activity

PRIMARY

45-80 m.

25-45 m.

5-25 m.

0-5 m.

Biodiversity

Student Activity - ANSWERS

PRIMARY

Emergent Layer
45-80 m.

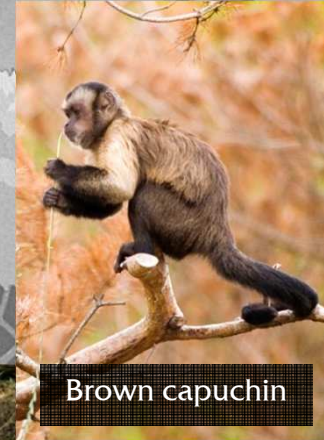


Illiger's macaw

Canopy Layer
25-45 m.



Pygmy marmoset



Brown capuchin

Understory
5-25 m.



Jaguar

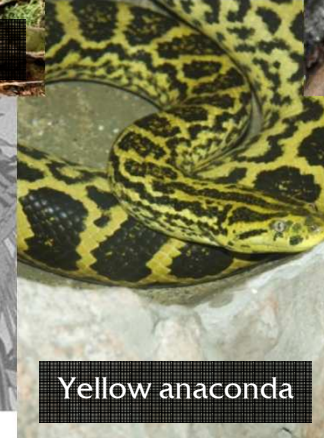


Poison dart frog

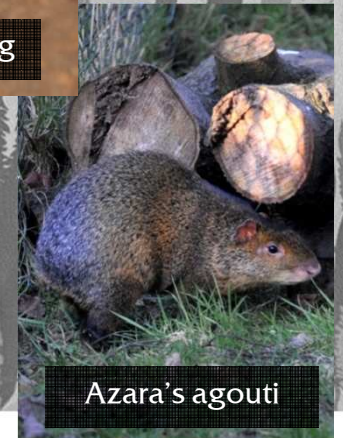
Forest Floor
0-5 m.



Giant anteater



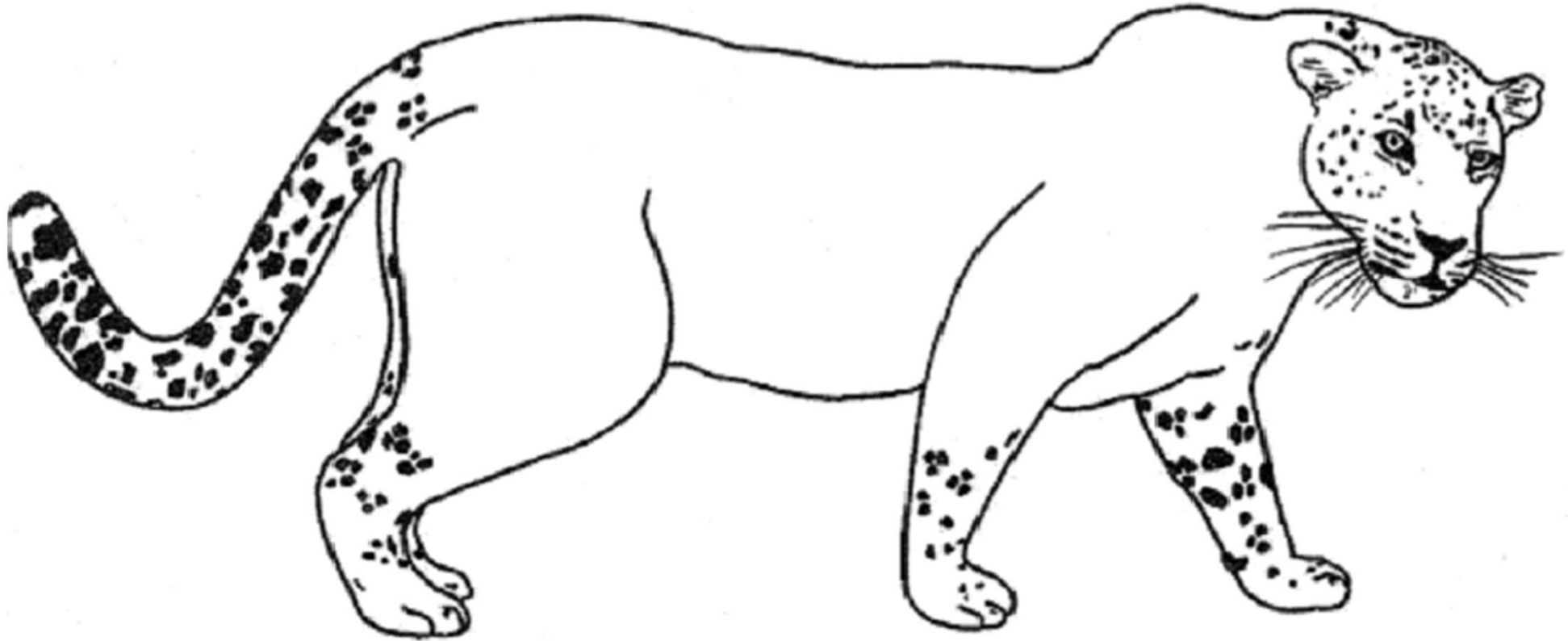
Yellow anaconda



Azara's agouti

The leopard

This leopard has lost his spots. Fill in the spots on his body.



Leopards are nocturnal, this means they are most active at night.



Male leopards are bigger than females.



Leopards are light coloured with dark spots to help them hide, this is camouflage.



Leopards can be found in many places including rainforests and mountains.



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OF THREATENED SPECIES™

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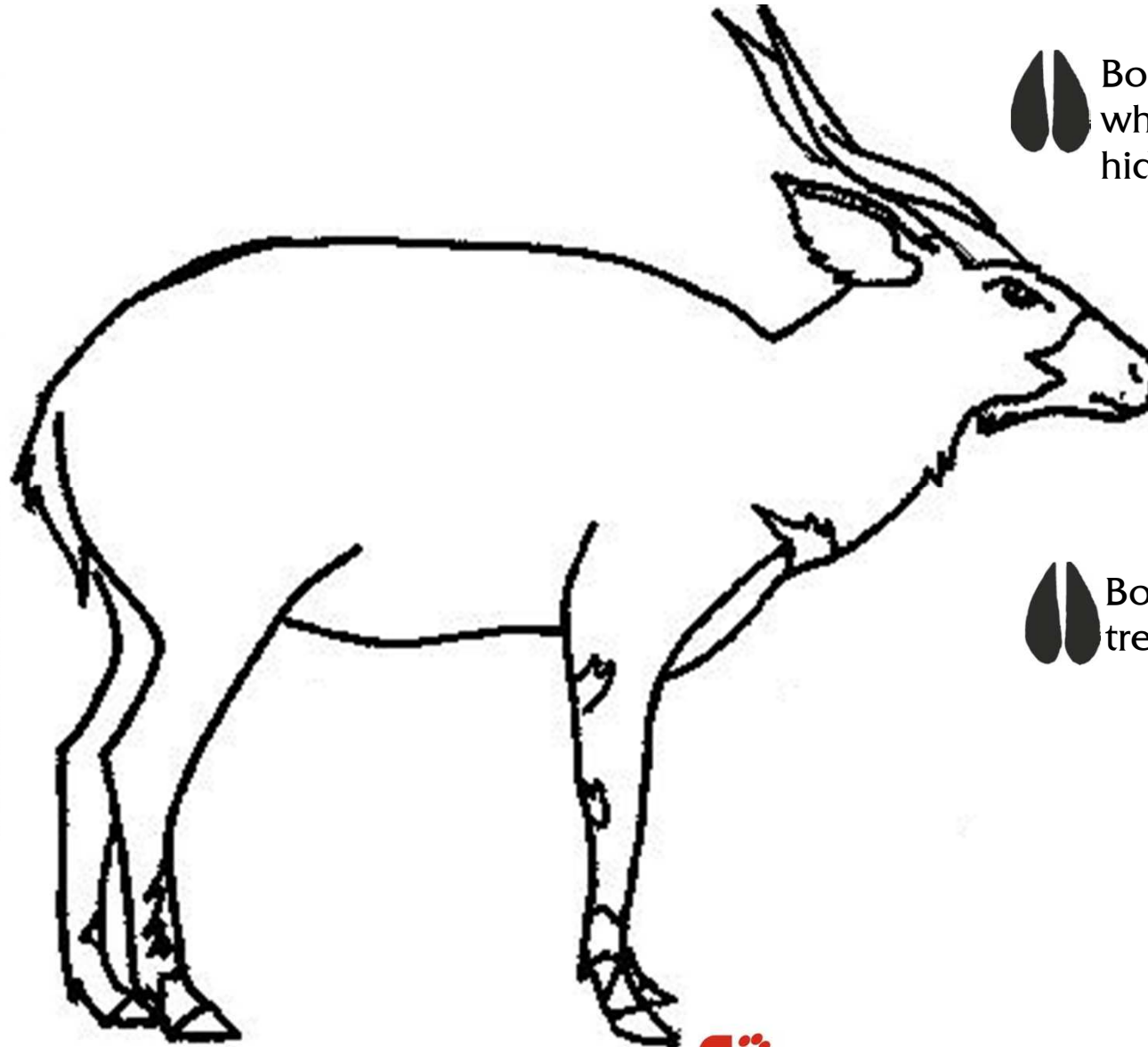
EXTINCT

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Likely to become
threatened in the
near future

The Eastern bongo

This bongo has lost his stripes. Fill in the stripes on his body.



Bongos are reddish-brown with white stripes. This helps them to hide.



Bongos live in rainforests in Africa.



Bongos eat leaves and roots from trees and bushes.



Bongos are the largest type of forest antelope.



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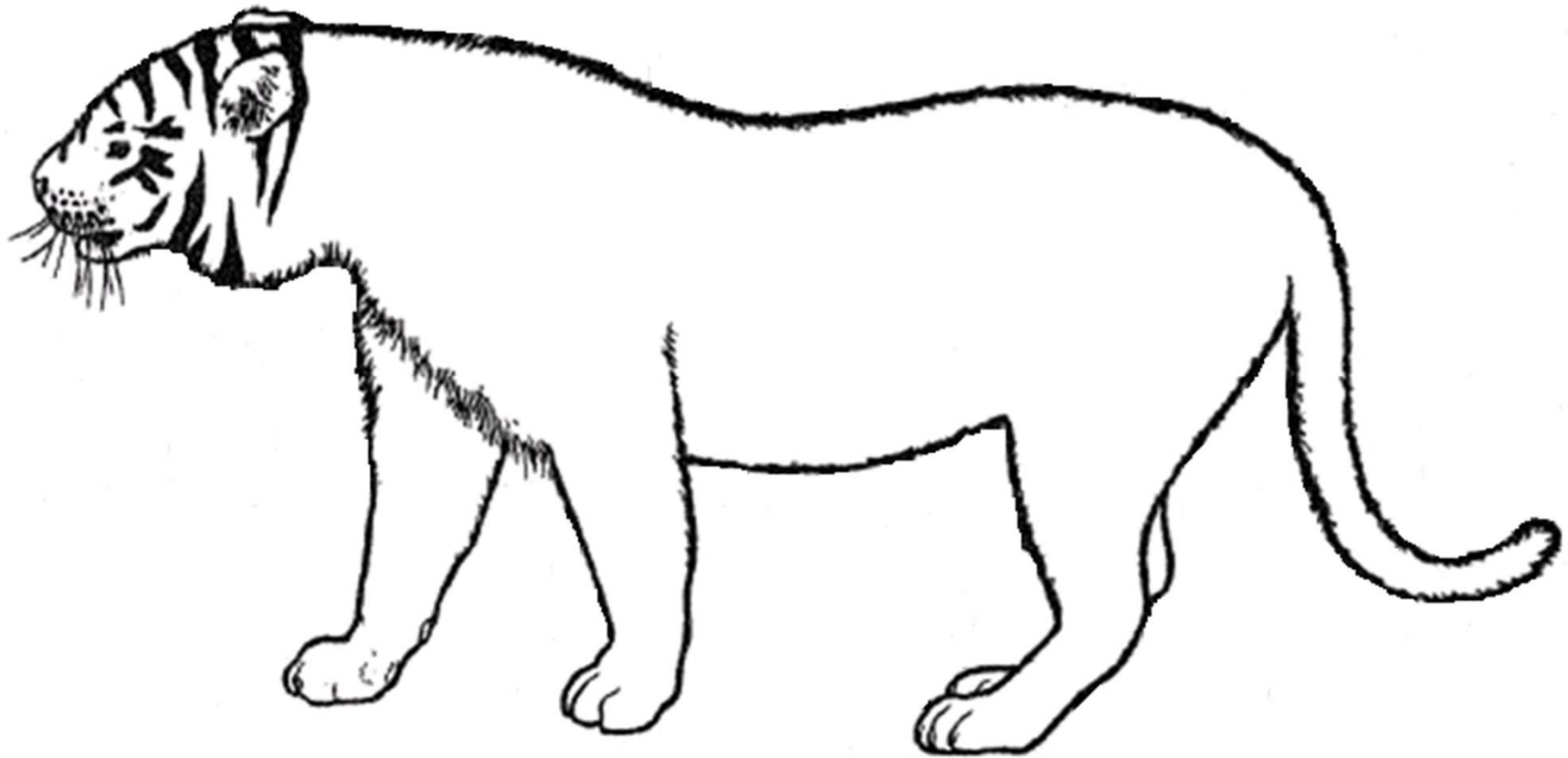


EXTINCT IN THE WILD	EXTINCT
EW	EX

Extremely high risk of extinction in the near future

The tiger

This tiger has lost his stripes. Fill in the stripes on his body.



Tigers are very good swimmers, fast runners and excellent jumpers.



Tigers are light coloured with dark stripes to help them hide, this is camouflage.



Tigers are the largest of the big cats.



Tigers can be found in many places in Asia including rainforests and swamps.



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Likely to become
threatened in the
near future

Parrot Mask

Colour in and cut out this parrot mask. You could make it look just like the parrots in the Zoo or go wild and create your very own.

